In the Claims:

Claims 1-14 (Cancelled).

15. (Previously Presented) A process for reducing second-order nonlinearity of a frequency transposition device comprising a local oscillator providing a local oscillator signal, a current switching circuit comprising two differential pairs of transistors controlled by the local oscillator signal, and a calibration loop for calibrating the two differential pairs of transistors, the process comprising:

inactivating the local oscillator in a calibration mode for calibrating in succession the two differential pairs of transistors by setting to zero a reference path current of one of the pairs of transistors not undergoing calibration and setting a voltage difference applied to the control terminals of the other pair of transistors undergoing calibration until an output voltage of the frequency transposition device is set to zero to within a predetermined accuracy;

storing the voltage differences applied to the control terminals of the two differential pairs of transistors after calibration; and

activating the local oscillator in a normal mode for deactivating the calibration loop, and applying the stored voltage differences to the respective control terminals of the two differential pairs of transistors.

16. (Previously Presented) A process according to Claim 15, wherein the two differential pairs of transistors are statically mutually disconnected and dynamically mutually connected.

17. (Previously Presented) A process according to Claim 15, wherein the two differential pairs of transistors comprise bipolar transistors, and the control terminals correspond to bases of the bipolar transistors.

18. (Previously Presented) A process according to Claim 15, wherein the reference path corresponds to ground.

19. (Previously Presented) A process according to Claim 15, wherein in the calibration mode setting the voltage differences applied to the control terminals of the two differential pairs of transistors comprises detecting a change in a sign of a difference in the output voltage.

20. (Previously Presented) A process according to Claim 19, wherein the frequency transposition device comprises a pair of digital/analog converters coupled to the controls terminals of the two differential pairs of transistors for providing the stored voltage differences thereto, the pair of digital/analog converters operating in response to a digital control word; wherein setting the voltage differences comprises modifying the digital control word; and wherein storing the voltage differences after calibration comprises storing the corresponding digital control word.

21. (Previously Presented) A process according to Claim 20, further comprising modifying the digital control word until the change in the sign of the difference in the output voltage is detected.

22. (Previously Presented) A process for operating a cellular mobile telephone comprising a radio frequency stage and a processing stage connected thereto, the radio frequency stage comprising at least one mixer comprising a local oscillator providing a local oscillator signal, a current switching circuit comprising two differential pairs of transistors controlled by the local oscillator signal, and a calibration loop for calibrating the two differential pairs of transistors, the process comprising:

reducing second-order nonlinearity of the at least one mixer by performing the following

inactivating the local oscillator in a calibration mode for calibrating in succession the two differential pairs of transistors by setting a reference path current of one of the pairs of transistors not undergoing calibration to a predetermined level and setting a voltage difference applied to control terminals of the other pair of transistors undergoing calibration until an output voltage of the frequency transposition device is set to the predetermined level,

storing the voltage differences applied to the control terminals of the two differential pairs of transistors after calibration, and

activating the local oscillator in a normal mode and applying the stored voltage differences to the respective control terminals of the two differential pairs of transistors.

23. (Previously Presented) A process according to Claim 22, wherein the two differential pairs of transistors comprise bipolar transistors, and the control terminals correspond to bases of the bipolar transistors.

24. (Previously Presented) A process according to Claim 22, wherein the reference path corresponds to ground; and wherein the predetermined level is zero to within a predetermined accuracy.

25. (Previously Presented) A process according to Claim 22, wherein in the calibration mode setting the voltage differences applied to the control terminals of the two differential pairs of transistors comprises detecting a change in a sign of a difference in the output voltage.

26. (Previously Presented) A process according to Claim 25, wherein the frequency transposition device comprises a pair of digital/analog converters coupled to the controls terminals of the two differential pairs of transistors for providing the voltage differences thereto, the pair of digital/analog converters operating in response to a digital control word; wherein setting the voltage differences comprises modifying the digital control word; and wherein storing the voltage differences applied after calibration comprises storing the corresponding digital control word.

27. (Previously Presented) A process according to Claim 26, further comprising modifying the digital control word until the change in the sign of the difference in the

output voltage is detected.

28. (Previously Presented) A frequency transposition device comprising:

a local oscillator providing a local oscillator signal;

a current switching circuit comprising two differential pairs of transistors controlled by the local oscillator signal, each transistor comprising a control terminal;

a calibration loop for calibrating the two differential pairs of transistors in succession by setting a voltage difference applied to the control terminals of one of the pairs of transistors undergoing calibration until an output voltage of the frequency transposition device is set to zero to within a predetermined accuracy;

a storage circuit for storing the voltage differences applied to the control terminals of the two differential pairs of transistors after calibration; and

a control circuit for operating said calibration loop in either a calibration mode or a normal mode by

inactivating said local oscillator in the calibration mode for calibrating in succession the two differential pairs of transistors by setting to zero a reference path current of one of the pairs of transistors not undergoing calibration while setting the voltage difference, and

activating said local oscillator in the normal mode and applying the stored voltage

differences to the respective control terminals of the two differential pairs of transistors.

29. (Previously Presented) A frequency transposition device according to Claim 28, wherein the two differential pairs of transistors are statically mutually disconnected and dynamically mutually connected.

30. (Previously Presented) A frequency transposition device according to Claim 28, wherein the two differential pairs of transistors comprise bipolar transistors, and the control terminals correspond to bases of the bipolar transistors.

31. (Previously Presented) A frequency transposition device according to Claim 28, wherein the reference path corresponds to ground.

32. (Previously Presented) A frequency transposition device according to Claim 28, wherein said calibration loop comprises a detection circuit for detecting a change in a sign of a difference in the output voltage.

33. (Previously Presented) A frequency transposition device according to Claim 32, further comprising a pair of differential outputs coupled to said current switching circuit; and wherein said detection circuit comprises a comparator having inputs coupled to the pair of differential outputs.

34. (Previously Presented) A frequency transposition device according to Claim 33, wherein said calibration loop comprises:

a pair of digital/analog converters coupled to the control terminals of the two differential pairs of transistors for providing the voltage difference thereto, said pair of digital/analog converters operating in response to a digital control word; and

a monitoring circuit connected to an output of said detection circuit for providing successive control words until a stop signal delivered by said detection circuit is received.

35. (Previously Presented) A frequency transposition device according to Claim 34, wherein each digital/analog converter provides a voltage difference proportional to an absolute temperature.

36. (Previously Presented) A frequency transposition device according to Claim 34, wherein said control circuit deactivates said calibration loop by deactivating said detection circuit and said monitoring circuit.

37. (Previously Presented) A frequency transposition device according to Claim 28, further comprising a pair of capacitors connected together in series; and wherein the control terminals of each pair of transistors are coupled to said pair of capacitors, and a midpoint of said two capacitors is connected to said local oscillator.

38. (Previously Presented) A frequency transposition device according to Claim 28, wherein said local oscillator, said current switching circuit, said calibration loop, said storage circuit and said control circuit are integrated so that the frequency transposition device is an integrated circuit.

39. (Previously Presented) A cellular mobile telephone comprising:

a radio frequency stage comprising at least one mixer comprising

a local oscillator providing a local oscillator signal,

a current switching circuit comprising two differential pairs of transistors controlled by the local oscillator signal, and

a calibration loop for calibrating the two differential pairs of transistors; and

a processing stage coupled to said radio frequency stage for reducing second-order nonlinearity of said at least one mixer by performing the following

inactivating said local oscillator in a calibration mode for calibrating in succession the two differential pairs of transistors by setting a reference path current of one of the pairs of transistors not undergoing calibration to a predetermined level and setting a voltage difference applied to control terminals of the other pair of transistors undergoing calibration until an output voltage of the frequency transposition device is set

to the predetermined level, and

activating said local oscillator in a normal mode and applying the voltage differences to the respective control terminals of the two differential pairs of transistors.

40. (Previously Presented) A cellular mobile telephone according to Claim 39, wherein said at least one mixer further comprises a storage circuit for storing the voltage differences applied to the control terminals of the two differential pairs of transistors after calibration.

41. (Previously Presented) A cellular mobile telephone according to Claim 39, wherein the two differential pairs of transistors comprise bipolar transistors, and the control terminals correspond to bases of the bipolar transistors.

42. (Previously Presented) A cellular mobile telephone according to Claim 39, wherein the reference path corresponds to ground; and wherein the predetermined level is zero to within a predetermined accuracy.

43. (Previously Presented) A cellular mobile telephone according to Claim 39, wherein said calibration loop comprises a detection circuit for detecting a change in a sign of a difference in the output voltage.

44. (Previously Presented) A cellular mobile telephone according to Claim 43, wherein said at least one

mixer further comprises a pair of differential outputs coupled to said current switching circuit; and wherein said detection circuit comprises a comparator having inputs coupled to the pair of differential outputs.

45. (Previously Presented) A cellular mobile telephone according to Claim 43, wherein said calibration loop comprises:

a pair of digital/analog converters coupled to the control terminals of the two differential pairs of transistors for providing the voltage difference thereto, said pair of digital/analog converters operating in response to a digital control word; and

a monitoring circuit connected to an output of said detection circuit for providing successive control words until a stop signal delivered by said detection circuit is received.

46. (Previously Presented) A cellular mobile telephone according to Claim 39, wherein each digital/analog converter provides a voltage difference proportional to an absolute temperature.

47. (Previously Presented) A cellular mobile telephone according to Claim 45, wherein said processing unit deactivates said calibration loop by deactivating said detection circuit and said monitoring circuit.

48. (Previously Presented) A cellular mobile telephone according to Claim 39, wherein said at least one mixer further comprises a pair of capacitors connected

together in series; and wherein the control terminals of each pair of transistors are coupled to said pair of capacitors, and a midpoint of said two capacitors is connected to said local oscillator.